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IN THE CLAIMS

1. (Currently amended) An apparatus comprising:
a receiver for receiving a first frame via a shared-communications channel; and
a processor for generating a second frame that comprises both a data payload and an acknowledgement of the receipt of said first frame and wherein, following ~~a~~the first frame, subsequent frames include an acknowledgement for frames requiring an acknowledgment as well as an acknowledgement for frames not requiring an acknowledgement, wherein said processor is also for one of the group consisting of coding at least one bit of said second frame, compressing at least one bit of said second frame, filtering at least one bit of said second frame and performing an application-specific operation on at least one bit of said second frame.
2. (Original) The apparatus of claim 1 wherein said processor is also for encrypting at least one bit of said second frame.
3. (Original) The apparatus of claim 1 further comprising a transmitter for transmitting said second frame via said shared-communications channel.
4. (Canceled)
5. (Original) The apparatus of claim 1 further comprising a host interface for receiving said data payload from a host computer.
6. (Original) The apparatus of claim 1 wherein said second frame also comprises a poll.
7. (Original) The apparatus of claim 1 wherein said first frame comprises an acknowledgement of the receipt of a third frame.

8. (Currently amended) An apparatus comprising:

(i) a first station for:

(a) transmitting a first frame comprising a first poll to a second station; and

(b) transmitting a second frame comprising a first acknowledgement and a second poll to said second station, wherein said second frame is available before a third frame is transmitted; and

(ii) said second station for:

(a) generating said third frame comprising a data payload and a second acknowledgement before said transmitting of said first frame; and

(b) transmitting said third frame to said first station wherein said third frame is available before said transmitting of said second frame and wherein, following a first frame, subsequent frames include an acknowledgement for frames requiring an acknowledgment as well as an acknowledgement for frames not requiring an acknowledgement, and wherein said processor is also for one of the group consisting of coding at least one bit of said second frame, compressing at least one bit of said second frame, filtering at least one bit of said second frame and performing an application-specific operation on at least one bit of said second frame.

9. (Original) The apparatus of claim 8 further comprising encrypting at least one bit of said third frame before said transmitting of said first frame.

10. (Original) The apparatus of claim 8 further comprising a host computer for generating said data payload.

11. (Canceled)

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12. (Currently amended) A method comprising:

generating a first frame comprising a data payload and an acknowledgement; ~~and~~

receiving via a shared-communications channel a second frame after said generating;

wherein said acknowledgement is intended as a response to said second frame and wherein, following a first frame, subsequent frames include an acknowledgement for frames requiring an acknowledgment as well as an acknowledgement for frames not requiring an acknowledgement; and one of the group consisting of coding at least one bit of said second frame, compressing at least one bit of said second frame, filtering at least one bit of said second frame and performing an application-specific operation on at least one bit of said second frame.

13. (Original) The method of claim 12 further comprising encrypting at least one bit of said first frame before said receiving.

14. (Original) The method of claim 12 further comprising transmitting via said shared-communications channel said first frame after said receiving.

15. (Canceled)

16. (Original) The method of claim 12 wherein said first frame also comprises a poll.

17. (Original) The method of claim 12 wherein said second frame comprises an acknowledgement.

18. (Currently amended) A method comprising:

generating a first frame comprising a data payload and a first

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acknowledgement before said transmitting of a second frame;

transmitting a second frame comprising a first poll from a first station to a second station; and

transmitting said first frame from said second station to said first station; and transmitting a third frame comprising a second acknowledgement and a second poll from said first station to said second station and wherein, following a first frame, subsequent frames include an acknowledgement for frames requiring an acknowledgement as well as an acknowledgement for frames not requiring an acknowledgement and one of the group consisting of coding at least one bit of said second frame, compressing at least one bit of said second frame, filtering at least one bit of said second frame and performing an application-specific operation on at least one bit of said second frame.

19. (Original) The method of claim 18 further comprising encrypting at least one bit of said second frame before said transmitting of said second frame.

20. (Canceled)

21. (Original) The method of claim 18 further comprising transferring said data payload from a host computer to said second station.

22. (Original) The method of claim 18 wherein said second frame also comprises data.

23. – 26. (Canceled)